EXHIBIT 21

[Submitting Counsel below]

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA

SAN FRANCISCO DIVISION

IN RE: UBER TECHNOLOGIES, INC. PASSENGER SEXUAL ASSAULT LITIGATION This Document Relates to: ALL ACTIONS	**MDL No. 3084 CRB** **DECLARATION OF MICHAEL CIARAMITARO IN SUPPORT OF PLAINTIFFS' BRIEF FOR PLAINTIFFS' PROPOSED ORDER GOVERNING THE PRODUCTION OF ELECTRONICALLY STORED INFORMATION AND HARD COPY DOCUMENTS**

<u>DECLARATION OF MICHAEL CIARAMITARO</u>

I, Michael Ciaramitaro, declare and state as follows:

1.   My name is Michael Ciaramitaro, and I am the Vice President of Technical Operations and Digital Forensics for International Litigation Solutions, Inc. ("ILS"). ILS is a full-service electronic discovery company. ILS specializes in, among other things, forensic collection, processing, and hosting of electronically stored information ("ESI") from various data systems, including email systems, document collaboration systems, social media, computers, flash drives, mobile devices, and database systems. I know the facts and opinions contained in this declaration from my own experience and knowledge, except where stated otherwise, and will testify to the matters herein if called upon to do so.

I.   Qualifications

2.   I hold a Bachelor of Science degree in Business Management from the Pepperdine Graziadio School of Business and Management.

3.   I have over 20 years of experience in computer forensics and electronic discovery and have provided testimony in dozens of matters pertaining to collecting and analyzing ESI. I have offered expert testimony in the areas of data collection related to email, social media, enterprise data systems, cloud data, computers, databases, and mobile devices. I have consulted as an ESI expert in numerous matters involving complex litigation involving electronic data.

4.   I obtained my EnCase Certified Examiner (EnCE)[1] through Guidance Software in 2002 and have maintained my knowledge in computer forensics through hundreds of hours of classroom training over the course of the last 20 years.

5.   From September 2001 to August 2007, I was a Senior Manager of Quality Assurance at Guidance Software, Inc., a company that develops industry-leading computer forensics software products. As a Quality Assurance senior manager, I became an expert in computer forensic software validation and testing.

6.   From March 2008 to August 2010, I was a Senior Forensic Investigator for Online Security, Inc., a Los-Angeles based electronic discovery company. From October 2010 to March 2011, I was a Senior Associate, Forensic Technology Services for Price Waterhouse Coopers. From 2011 to present, I have held the titles of Senior Vice President or Director of

---

[1] EnCE certification is a widely respected credential for forensic professionals. It certifies proficiency in the use of EnCase, which was a pioneering tool for forensic collection and examination and remains a key component of most forensic professionals' tool kits.

1   Forensics at FRONTEO, Teris, DiscoveryReady, Inventus, and ILS.

2   7.   I oversee and manage the day-to-day operation of ILS's digital forensics

3   collections, data processing and loading, and all other technical operations and services at ILS.

4   In the course of my career in electronic discovery, I have obtained a mastery in industry-standard

5   practices for performing data collections and processing on all standard types of ESI including

6   Google Workspace, M365 Purview, social media, cloud storage, mobile phones, databases, and

7   computing devices in part through thousands of hours spent in support of legal matters. I have

8   submitted expert testimony in many legal matters on the topic of emerging technology including

9   procedures for handling cloud data such as Google Workspace.

10 **II.   Google Workspace Metadata**

11   8.   ILS is the retained electronic discovery consultant for Plaintiffs in the instant

12 action. Plaintiffs retained ILS to provide electronic discovery services for the MDL, including

13 Defendants' productions and related consulting, data collection, processing, expert analysis and

14 testimony.

15   9.   It is my understanding through numerous meet and confer discussions with

16 Defendants counsel and their ESI vendor and technical team, that Uber uses Google Workspace

17 to email, chat and collaborate electronically and that Uber's intentions are to use Google Vault,

18 which is the Google Workspace discovery tool made available to its licensed users, to comply

19 with its collection requirements.

20   10.   During the collection of Google Email, Drive and Chat data, Google Vault

21 automatically and without any additional intervention, configuration, or steps, includes metadata

22 for the collected files, as separate XML or CSV documents.

23   11.   I have prepared *Exhibit 1 – Google Workspace Metadata*, which is a thorough

24

25   **3**   **MDL No. 3084 CRB**

and complete list of Google Vault metadata fields, automatically included with data collected through Google Vault, the field definition, document type and the ease of access of the respective field provided in Plaintiffs' Proposed ESI Order, Appendix 2.

A. Google Drive & Linked Documents:

12.   Google Drive and Linked Documents refers to files maintained within the Google Workspace environment and collected using Google Vault. These files include a unique and distinct set of metadata values referenced under *Exhibit 1 – Google Workspace Metadata*, under Document Type "Google Drive & Linked Documents". An XML document which lists each file's metadata values is included with every Google Drive & Linked Document collection.

B. Google Emails & Chat (Messages)

13.   Google Emails & Chats (messages) refers to communications and files maintained within the Google Workspace environment and collected using Google Vault. These communications include a distinct set of metadata fields referenced as Document Type "Google Emails & Chat (Messages)", in Exhibit 1 – Google Workspace Metadata. The XML document clearly and plainly lists the metadata values for each file collected through Google Vault and included by default. Additionally, there are 5 metadata values that are stored in accompanying CSV documents. The CSV document clearly and plainly lists the metadata values for each file collected through Google Vault included by default and without any additional intervention. These 5 metadata values are listed below including their level of importance to know what they are and where they came from.

- **Account:** Google Email Address where the email data came from.

- **Rfc822MessageID:** Each message is assigned a unique Message ID which correlates back to the collected message and corresponding linked drive files.

- **GmailMessageID:** A unique message ID used to manage specific messages within the Gmail API.

- **Labels:** Gmail's use Labels instead of folders to organize communications. Without Labels, it will be unclear whether a message is a draft, sent or received communication.

- **DriveURL:** Published URL where a collected Google Drive file resided at time of collection.

C. Google Voice

14.   Google Voice is a service which offers its users the ability to maintain phone calls, text messages and voicemails and are included during a Google Vault collection. These files maintain a distinct set of metadata fields referenced under Document Type "Google Voice", in Exhibit 1 – Google Workspace Metadata. There are only 2 requested metadata fields associated with Google Voice data;

- **Participant Phone Numbers:** Includes the phone numbers used during an exchange of text message or calls and is required to know who is involved in a communication.

- **Owner Phone Number:** Includes the phone number(s) belonging to the account holder and is required to know who's account and phone number is associated with the collected Google Voice data.

III.   Conclusion

15.   It is my understanding after several meet and confers with Defendants legal team and technical ESI vendors, that the workflow contemplated to process the Google Workspace, will leverage the metadata documents included in the data collection and described herein, so that the Google Workspace metadata will be made available to Plaintiffs in the Defendants

productions. Google Workspace metadata includes fields that do not correspond or map to more usual metadata fields but are critical to understanding key aspects of a document such as its context and who had what level of access to it. An ESI workflow designed to include the Google Workspace specific metadata fields and values, should be inclusive of all metadata fields produced by Google Workspace and not only a subset. Since Defendants have already made accommodations for the inclusion of the metadata included during a Google Vault collection, then further inclusion of metadata specifically excluded should be made to avoid the exclusion of valuable and important metadata values not available anywhere else.

Exhibit 1 – Google Workspace Metadata

Field Name	Field Definition	Document Type	Ease of Access
DocID	Document ID obtained from Google Vault metadata at time of document collection.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
#Author	The email address of the person who owns the file in Drive. For a shared drive file, it shows the shared drive name.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
Collaborators	The accounts and groups that have direct permission to edit the file or add comments and users with indirect access to the file.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
Viewers	The accounts and groups that have direct permission to view the file and users with indirect access to the file.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
#DateCreated	The date a Google file was created in Drive. For non-Google files, usually the date the file was uploaded to Drive.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
#Date Modified	The date the file was last modified.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
#Title	The filename as maintained in the Google Drive and which was originally assigned.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
Filename	The file name that correlates to the	Google Drive & Linked Documents	Available in any Google Vault collection

	metadata with the file in the export ZIP file.		(metadata.xml), where present.
FileSize	The size of the file in bytes.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
Hash	The MD5 hash of the file.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
SlideRecording	Metadata about recordings.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
ClientSideEncrypted	Indicates whether the file was encrypted in the Google Workspace using client-side encryption.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
DocumentType	The file type for Google files.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
SharedDriveID	The identifier of the shared drive that contains the file	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
DocParentID	Unique identifier for page the site is a part of.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
SiteTitle	The name of the Sites page.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
Other	Includes users for whom Vault could not determine permission levels at the time of export.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
SourceHash	A unique hash value for each version of a file.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.

DocumentType	The file type for Google files.	Google Drive & Linked Documents	
PublishedURL	Metadata included with Google Drive exports for sites, including the address of the published page.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
SiteTitle	Metadata included with Google Drive exports for sites, including the name of the page.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
LabelName	Google Drive labels and fields.	Google Drive & Linked Documents	Available in any Google Vault collection (metadata.xml), where present.
Account	Metadata included with the Google Email exports which contains the email address of the collected email account.	Google Emails & Chat (Messages)	Available in any Google Vault collection (metadata.CSV), where present.
Rfc822MessageId	A message ID used to correlate message metadata with the collected message and corresponding Linked Drive Files, Drive Links CSV.	Google Emails & Chat (Messages)	Available in any Google Vault collection (metadata.CSV), where present.
GmailMessageId	A unique message ID used to manage specific messages with the Gmail API.	Google Emails & Chat (Messages)	Available in any Google Vault collection (metadata.CSV), where present.
Labels	Labels applied to the message by Gmail or the user.	Google Emails & Chat (Messages)	Available in any Google Vault collection (metadata.CSV), where present.
DriveUrl	Published URL corresponding to the Google Drive document.	Google Emails & Chat (Messages)	Available in any Google Vault collection (drive links.CSV), where drive lins are included.

Field	Description	Source	Availability
#DateFirstMessageSent	The timestamp for when the first message in a conversation was sent	Google Emails & Chat (Messages)	Available in any Google Vault collection Chat (metadata.xml), where Chats are included.
#DateLastMessageReceived	The timestamp for when the last message in a conversation was received.	Google Emails & Chat (Messages)	Available in any Google Vault collection Chat (metadata.xml), where Chats are included.
#DateFirstMessageReceived	The timestamp for when the first message in a conversation was received.	Google Emails & Chat (Messages)	Available in any Google Vault collection Chat (metadata.xml), where Chats are included.
#DateLastMessageReceived	The timestamp for when the last message in a conversation was received.	Google Emails & Chat (Messages)	Available in any Google Vault collection Chat (metadata.xml), where Chats are included.
RoomID	The space, group chat, or DM identifier that the message belongs to.	Google Emails & Chat (Messages)	Available in any Google Vault collection Chat (metadata.xml), where Chats are included.
Participants	The email addresses of all users who participated in the conversation.	Google Emails & Chat (Messages)	Available in any Google Vault collection Chat (metadata.xml), where Chats are included.
RoomName	The value of the space, Group Chat, list of accounts that participated.	Google Emails & Chat (Messages)	Available in any Google Vault collection Chat (metadata.xml), where Chats are included.
ConversationType	The message type.	Google Emails & Chat (Messages)	Available in any Google Vault collection Chat (metadata.xml), where Chats are included.
ParticipantPhoneNumbers	The phone numbers of the participants.	Google Voice	Available in any Google Vault collection Chat (metadata.xml), where Chats are included.
OwnerPhoneNumbers	The value includes multiple phone numbers when the user's number changed.	Google Voice	Available in any Google Vault collection Chat (metadata.xml), where Chats are included.

1 │ I declare under penalty of perjury that the foregoing is true and correct to the best of my

2 │ knowledge.

3

   DATED: February 12, 2024

4 │   _____
                                                       Michael Ciaramitaro
5 │   VP of Technical Operations
                                                       International Litigation
6 │   Services, Inc.
                                                       mciaramitaro@ilsteam.com

7

8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25   **11**   **MDL No. 3084 CRB**